

REMARKS

Reconsideration of the application is respectfully requested.

I. Status of the Claims

Claims 1 - 7 are in the application.

Claims 1-7 are amended. No new matter is added.

II. Rejections under 35 U.S.C. § 102

The rejection of claims 1-6 under 35 U.S.C. § 102(b) as being anticipated by Hollenback et al., (U.S. Patent No. 4,409,532) is traversed.

Applicant's invention relates to providing a high torque starting system for a single phase induction motor. The stator of the induction motor supports two coils, a starting coil and a running coil. To obtain the high torque, an electronic circuit control unit having two switches is provided where each switch is connected in series with one of the two winding in the motor. A first switch, when closed, connects the starting coil to a power source and the second switch, when closed, connects the running coil to the power source. The control unit is programmed to control the starting time of the flow of current through both the starting coil and the running coil by selectively opening and closing the first and second switches.

At start up, only the first switch is closed and current is supplied only to the starting coil. Also, at start up, the second switch is open and no current is supplied to the running coil. See paragraphs [0025] and [0026] of the PreGrant Publication No.: US 2007/0164700 A1, where it is stated that the control unit is programmed to operate the running switch in order to cause a delay in the current supplied to the running coil relative to the current supplied to the starting coil during the motor start for a predetermined time interval. Thus, in Applicant's invention, at start up, current is supplied only to the starting coil and no current is supplied to the running coil.

Referring now to the reference cited, and contrary to what is disclosed in the application, Hollenbeck is concerned with controlling the direction of rotation of a reversible split phase induction motor at start up. In Hollenbeck, at start up in the high torque direction, an electronic control triggers a thyristor into conduction to feed current to the starting coil at a first firing angle to initiate motor rotation in one direction and at a second firing angle to initiate motor rotation in the other direction. At substantially the same instant when the starting coil is energized, and during the same half phase cycle of the AC current, the running coil is also energized. See Col. 5, lines 65-66 where it is stated that the firing angle for the run winding is chosen to be 35 degrees, and in Col. 6, lines 10-15 where it is stated that the firing angle for the starting winding is in the range of 25 degrees to 45 degrees. In Col. 6, lines 15-20, Hollenbeck states that the firing angle for the starting winding may be the same as that chosen for the run winding. Hollenbeck then states that in the illustrative embodiment, the firing angle for both run and start is chosen to be 40 degrees. Thus, Hollenbeck discloses that both the starting winding and the running winding are energized at start up. He does not disclose energizing only the starting winding at start up as is disclosed in the application. Thus, Hollenbeck discloses a control which is used only to start the motor in one of two rotational directions, either clockwise or counter-clockwise.

Claim 1 clearly avoids Hollenbeck by reciting, in combination that: "... said control unit is programmed to operate the running switch in order to cause a delay in the supply of the current supplied to the running coil in relation to the supply of the current supplied to the starting coil during the motor start for a determined time interval ...".

Hollenbeck neither discloses nor suggests doing what is disclosed and positively recited in claim 1, that of feeding current only to the starting coil and not to the running coil at start up.

Claims 2-6 depend from claim 1 and, therefore, for the reasons given above, also avoid Hollenbeck.

III. Rejections under 35 U.S.C. § 103

The rejection of claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Hollenback is traversed. Claim 7 depends from claim 1 and, therefore, for the reasons noted above, is also considered to be in condition for allowance as it includes all of the limitations of claim 1.

CONCLUSION

In view of the above, pending independent Claim 1 and dependent Claims 2-7 in this application are believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

The Examiner is respectfully requested to contact the undersigned at the telephone number indicated below if the Examiner believes any issue can be resolved through either a Supplemental Response or an Examiner's Amendment.

Dated: March 12, 2008

Respectfully submitted,

By 

Louis J. DeJuidice

Registration No.: 47,522

DARBY & DARBY P.C.

P.O. Box 770

Church Street Station

New York, New York 10008-0770

(212) 527-7700

(212) 527-7701 (Fax)

Attorneys/Agents For Applicant